# Chapter 62-252 Gasoline Vapor Control

### 62-252.100 Purpose and Scope.

- (1) The Department of Environmental Protection adopts this chapter to establish and administer a program to ensure the installation and proper use of gasoline vapor recovery equipment for fuel transport, transfer, and dispensing operations. The intent of this program is to reduce the release of potentially harmful hydrocarbon vapors into the atmosphere. The preventable release of gasoline vapors accounts for a large part of the inventory of volatile organic compounds released into the atmosphere each year by the petroleum marketing industry. These vapors contain known and suspected human carcinogens and play a major role in the formation of ground-level ozone, an air pollutant for which state and federal ambient air quality standards have been established.
- (2) This chapter addresses Stage I vapor control, Stage II vapor control, and gasoline tanker-truck testing, all designed to reduce the emissions of volatile organic compounds into the atmosphere.
  - (a) Stage I vapor control is applicable to gasoline dispensing facilities. It provides that no one shall transfer gasoline from a tanker truck into the storage tanks of a nonexempt dispensing facility unless the tanker and the storage tanks are equipped for submerged filling, and the vapors displaced during transfer are collected by a vapor recovery system.
  - (b) Stage II vapor control is also applicable to gasoline dispensing facilities. It provides that no one shall dispense gasoline from the gasoline pumps of a nonexempt facility unless the pumps and storage tanks are equipped so that the vapors displaced during transfer are collected by a vapor recovery system.
  - (c) Gasoline tanker-truck testing provides for the pressure testing of tanker trucks to protect against the release of gasoline vapors to the atmosphere due to leaks.
- (3) This chapter provides a gasoline vapor control program designed to significantly reduce emissions of volatile organic compounds and toxic air pollutants from the transport, transfer, and dispensing of gasoline in Florida.

History: New 2-2-93, Formerly 17-252.100.

62-252.100

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	02/02/93	01/08/93	03/24/94	59 FR 13883	04/25/94

#### **62-252.200** Definitions.

The following words and phrases when used in this chapter shall, unless content clearly indicates otherwise, have the following meanings:

- (1) "Department" The State of Florida Department of Environmental Protection.
- "Gasoline" Any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 4 pounds per square inch (27.6 kilopascals) or greater.
- (3) "Gasoline Dispensing Facility" Any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.
- (4) "Independent Small Business Marketer of Gasoline" A person or entity engaged in the marketing of gasoline who would be required to pay for the procurement and installation of vapor recovery equipment; i.e., the owner of the tanks and other dispensing equipment at a gasoline dispensing facility. A person or entity is not an independent small business marketer of gasoline if such person or entity:
  - (a) Is a refiner;
  - (b) Controls, is controlled by, or is under common control with a refiner;
  - (c) Is otherwise directly or indirectly affiliated with a refiner or with a person or entity who controls, is controlled by, or is under common control with a refiner (unless the sole affiliation is by means of a supply contract or an agreement or contract to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner or any such person or entity); or
  - (d) Receives less than 50 percent of its annual income from refining or marketing of gasoline.
- (5) "Refiner" A person or entity engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through the redistillation, cracking, or reforming of unfinished petroleum derivatives, and whose total refinery capacity is 65,000 barrels per day or greater. In determining the total refinery capacity, the capacity of any persons or entities who control, are controlled by, or are under common control with the refiner will be included with the capacity of such refiner.
- (6) "Reid Vapor Pressure" The absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum liquids except liquified petroleum gases as determined by American Society for Testing and Materials (ASTM) method D323-89.
- (7) "Significant D efect" Any defect in a vapor recovery system that may reduce the ability of the system to capture 95 percent by weight of the gasoline vapors that are generated during motor vehicle refueling.
- (8) "Significant Modification" Any modification of underground or aboveground gasoline storage tanks and their appurtenances that shall give the owner or operator a reasonable opportunity to install a Stage II vapor recovery system. Such modifications shall include, but not be limited to: replacement of underground pipes; replacement, repair or reconditioning of any gasoline storage tank facility; addition of any gasoline storage tanks to an existing storage tank facility; or installation of any Stage II vapor recovery piping.
- (9) "Stage I Vapor Recovery System" A system that captures and transfers gasoline vapors, which are generated by the transfer of gasoline from a delivery vessel to a gasoline dispensing facility's stationary tanks, into a vapor-tight delivery vessel through direct displacement caused by the gasoline being loaded.
- "Stage II Vapor Recovery System" A system that captures and transfers gasoline vapors, which are generated during motor vehicle refueling, into a gasoline dispensing facility's stationary tanks.
- (11) "Submerged Filling" The filling of a tanker truck or gasoline dispensing facility storage tank as follows:
  - (a) Tanker Truck: Filling with a drop tube which extends within six inches of the bottom of the compartment or through a nozzle installed at or within six inches of the bottom.
  - (b) Gasoline Dispensing Facility with Underground Tank: Filling with a drop tube or pipe which extends to within six inches of the tank bottom.
  - (c) Gasoline Dispensing Facility with Side-Loaded Tank: Filling through a fill pipe which has its discharge opening completely submerged when the liquid level in the tank is 18 inches above the bottom of the tank.
- (12) "Vapor Recovery System" A system that collects and conserves vapors that would otherwise be released to the atmosphere.

Thistory. Formerly 17-2.100, Amended 2-2-93, Formerly 17-232.200.	
	62-252.200
	· <del></del>

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94
1st Revision	02/02/93	01/08/93	03/24/94	59 FR 13883	04/25/94

#### 62-252.300 Gasoline Dispensing Facilities - Stage I Vapor Recovery.

- (1) Applicability. The emission limiting standards and control technology requirements as set forth in this section shall apply to:
  - (a) All gasoline dispensing facilities with a monthly gasoline throughput of 20,000 gallons (75,700 liters) or more located in any area designated as a nonattainment area or air quality maintenance area for ozone under Rule 62-275, F.A.C., and.
  - (b) All gasoline dispensing facilities which are subject to the Stage II vapor recovery requirements of Rule 62-252.400, F.A.C.
- (2) Prohibition. No owner or operator of any delivery vessel or gasoline dispensing facility subject to the provisions of this section shall transfer or cause or allow the transfer of gasoline from any such delivery vessel into any stationary storage tank located at any such gasoline dispensing facility unless the tank is equipped for submerged filling and the vapors displaced from the storage tank during filling are processed by a vapor recovery system in accordance with Rule 62-252.300(3), F.A.C.
- (3) Control Technology Requirements.
  - (a) The vapor recovery system required by this subsection shall include one or more of the following control methods:
    - 1. A vapor-tight line from the storage tank to the delivery vessel and a system that will ensure the vapor line is connected before gasoline can be transferred into the tank; or,
    - 2. A system conforming with the equipment specifications of the EPA document, "Design Criteria for Stage I Vapor Control Systems Gasoline Service Stations," hereby adopted and incorporated by reference which will not allow emissions of volatile organic compounds in the displaced vapor at a rate greater than 80 mg/liter of gasoline (4.7 grains/gallon) transferred.
  - (b) The vapor-laden delivery vessel shall be subject to the following conditions:
    - 1. The delivery vessel shall be designed and maintained to be vapor-tight at all times except for normal pressure vacuum venting as required by the Federal Department of Transportation or for maintenance, inspection, or gauging.
    - 2. The vapor-laden delivery vessel shall be refilled only at a bulk gasoline plant or terminal complying with Rule 62-296.509 or 62-296.510, F.A.C.
- (4) Compliance Schedule. Any gasoline dispensing facility that becomes subject to the Stage I vapor recovery requirements of this rule by virtue of the 10,000-gallon Stage II applicability threshold of Rule 62-252.400, F.A.C., shall install a Stage I vapor recovery system no later than the date by which it must install a Stage II vapor recovery system pursuant to Rule 62-252.400, F.A.C.

History: Formerly 17-2.650(1)(f)11. Amended 2-2-93, Formerly 17-252.300.

\_\_\_\_\_62-252.300

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94
1 <sup>st</sup> Revision	02/02/93	01/08/93	03/24/94	59 FR 13883	04/25/94

## 62-252.400 Gasoline Dispensing Facilities - Stage II Vapor Recovery.

- (1) Applicability. The control technology requirements set forth in this section shall apply to all gasoline dispensing facilities located in Broward, Dade and Palm Beach counties which have dispensed 10,000 gallons (37,850 liters) or more of gasoline in any one month during or after 1991, unless the owner of any such facility demonstrates to the Department that it is an independent small business marketer of gasoline and has dispensed less than 50,000 gallons (189,250 liters) of gasoline in every month during and after 1991
- (2) Prohibition. No owner or operator of a gasoline dispensing facility subject to the provisions of this section shall transfer, allow the transfer, or provide equipment for the transfer of gasoline to a vehicular fuel tank unless the facility is equipped with a Stage II vapor recovery system which complies with the control technology requirements of Rule 62-252.400(3), F.A.C., and the system is properly used during the transfer.
- (3) Control Technology Requirements.
  - (a) The Stage II vapor recovery system shall be 95 percent efficient in the recovery by weight of vapors displaced from a vehicular fuel tank during refueling.
  - (b) All tank gauging and sampling sites shall be made vapor-tight so as to prevent emissions except when gauging or sampling takes place. All pressure and vacuum test ports shall be above grade but not more than thirty-six inches above grade. All overfill drains shall be made vapor-tight. No remote vapor check valves shall be used on balance-type systems.
  - (c) No Stage II vapor recovery system shall be installed unless the system:
    - 1. Meets the manufacturer's plans and specifications; and
    - 2. Is listed as certified by the State of California Air Resources Board in the document "Gasoline Marketing and Distribution Appendix D Phase II" hereby adopted and incorporated by reference.
  - (d) Operating instructions shall be conspicuously posted in the gasoline dispensing area for the system in use at the facility. The instructions shall clearly describe how to fuel vehicles correctly with vapor recovery nozzles. The operating instructions shall include a warning that repeated attempts to continue dispensing, after the system has indicated that the vehicle fuel tank is full, may result in spillage or recirculation of gasoline. If a toll-free telephone number is provided by the Department or its agents for consumers to report problems or voice complaints, such number shall also be conspicuously posted.

# (4) Compliance Schedules.

- (a) Any gasoline dispensing facility which commenced construction after November 15, 1990, but before November 15, 1992, and which dispenses or has dispensed 10,000 gallons or more in any one month during or after 1991, must install a Stage II vapor recovery system by June 30, 1993, or within six months following the first month in which the 10,000 gallon-per-month threshold is exceeded, whichever is later.
- (b) Any gasoline dispensing facility which was in operation or under construction on November 15, 1990, and which dispenses or has dispensed 100,000 gallons or more in any one month during or after 1991, must install a Stage II vapor recovery system by December 31, 1993, or within one year following the first month in which the 100,000 gallon-per-month threshold, whichever is later.
- (c) Any gasoline dispensing facility which was in operation or under construction on November 15, 1990, and which dispenses or has dispensed 10,000 gallons or more in any one month during or after 1991, but not as much as 100,000 gallons, must install a Stage II vapor recovery system by November 15, 1994, or within two years following the first month in which the 10,000 gallon-per-month threshold is exceeded, whichever is later.
- (d) Any gasoline dispensing facility which commences construction or undertakes a significant modification after November 15, 1992, must install a Stage II vapor recovery system prior to dispensing 10,000 gallons or more in any one month.

## (5) Testing.

(a) Once any newly installed Stage II vapor recovery system is in operational condition and ready for use, testing to verify the proper installation and function of the entire system (both infrastructure plumbing and aboveground equipment) shall be conducted. Tests shall be conducted in

accordance with the following test procedures as found in Appendix J of the EPA document, "Technical Guidance - Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities," Vol. II (EPA-450/3-91-022b), November 1991 hereby adopted and incorporated by reference:

- 1. Bay Area Source Test Procedure ST-30, Leak Test Procedure, or San Diego Test Procedure TP-91-1, Pressure Decay/Leak Test Procedure;
- 2. Bay Area Source Test Procedure ST-27, Dynamic Back Pressure, or San Diego Test Procedure TP-91-2, Pressure Drop vs. Flow/Liquid Blockage Test Procedure; and
- 3. Bay Area Source Test Procedure ST-37, Liquid Removal Devices.
- (b) Testing may be conducted by the Department or its agents or by an installation or testing company. In the case where a party other than the Department or its agents will be conducting the initially required testing, the owner or operator of the gasoline dispensing facility shall notify the Department or its agents at least seven days in advance as to when the testing will occur and what party will conduct the testing. The Department or its agents shall have the right to conduct the testing if it desires to do so.
- (c) Recertification of the function of the Stage II vapor recovery system shall be performed at least every five years or upon system replacement or major system modification, whichever occurs first. The recertification shall include all functional tests that were required for the initial system certification. A major system modification is considered to be replacing, repairing, or upgrading 75 percent or more of a facility's Stage II vapor recovery system.
- (6) Recordkeeping. All records required to be kept pursuant to this rule shall, unless otherwise specified in the text of this rule, be maintained for two years and be available for inspection by the Department or its agents upon request at the gasoline dispensing facility. If records are not kept at the facility, they shall be made available at the facility or other location acceptable to the Department upon seven days' notice. Records of the following are required:
  - (a) Gasoline quantities delivered to the facility.
  - (b) Gasoline quantities dispensed.
  - (c) Log of maintenance inspections of Stage II system components.
  - (d) Invoices or work orders of any repairs performed on Stage II system components.
  - (e) Results of any tests of the Stage II system and its components.
  - (f) Any permits issued by the Department or its agents for the operation of the gasoline dispensing facility and its Stage II system.
- (7) System Maintenance.
  - (a) All Stage II vapor recovery systems shall be maintained in proper working order in accordance with the manufacturer's specifications to ensure the integrity and efficiency of the systems. If the vapor recovery system or a component of the system contains a significant defect, the system or component shall be taken out of service. No person shall use or permit the use of that system or component until it has been repaired, replaced or adjusted. Minor defects, which do not significantly reduce the effectiveness of the system below 95 percent vapor recovery, such as very small holes, cracks, or gashes, must be repaired within seven days.
  - (b) Equipment defects that could significantly impair the effectiveness of the system and require that the system be taken out of service are:
    - 1. The absence or disconnection of any component which is required to be used in the system as certified.
    - A vapor hose which is crimped or flattened such that the vapor passage is blocked or the
      pressure drop through the vapor hose exceeds the allowed pressure drop in the system as
      certified.
    - 3. A nozzle boot or coaxial hose which is torn in one or more of the following manners:
      - a. Triangular-shaped or similar tear 1/2-inch or more to a side, or a hole 1/2-inch or more in diameter; or
      - b. Slit, 1-inch or more in length.
    - 4. A faceplate or flexible cone which is damaged in the following manner:

- a. For balance nozzles and for nozzles of aspirator or educator assist-type systems, damage such that the capability to achieve a seal with a fill-pipe interface is affected for 1/4 of the circumference of the faceplate (accumulated); or
- b. For nozzles of those vacuum assist-type systems which use a flexible cone, damage such that more than 1/4 of the flexible cone is missing.
- 5. A nozzle shutoff mechanism which malfunctions in any manner.
- 6. Vapor return lines, including such components as swivels, swing-joints, and underground or aboveground piping, which malfunction or which are blocked or restricted such that pressure drops through the lines exceed the requirements of the system as certified.
- 7. A vapor processing unit which is inoperative.
- 8. A vacuum producing device which is inoperative.
- 9. Pressure/vacuum relief valves, vapor check valves, or Stage I dry breaks which are inoperative.
- 10. Any equipment defect which is identified in the CARB Executive Order(s) applicable to the system as substantially impairing the effectiveness of the system in reducing air contaminants.
- 11. Any other defect which could impair the effectiveness of the system to recover 95 percent by weight of the gasoline vapors displaced.
- (c) All systems affected by the above defects are to be considered defective and shall be tagged "Out of Order." Except during repair activity, the "Out of Order" tag shall not be removed, and the tagged equipment shall not be used, permitted to be used, or provided for use until it has been repaired, replaced, or adjusted as necessary.
- (d) All replacement parts and parts used to retrofit existing dispensers for Stage II vapor recovery shall be original equipment manufacturer parts or aftermarket parts listed as described in 62-252.400(3)(c)2.
- (e) All facilities subject to this rule shall provide the Department or its agents access to any and all components as necessary to determine compliance with the provisions of this rule.
- (8) Training.
  - (a) The owner or operator of a gasoline dispensing facility subject to this rule shall ensure that at least one representative of the facility is knowledgeable about the operation and maintenance of the Stage II vapor recovery system in use at the facility.
  - (b) Information on the following subject areas shall be maintained by the owner or operator and, upon sale or transfer of the facility, be transferred to the new owner or operator:
    - 1. Equipment operation and function specific to the facility's Stage II vapor recovery system;
    - 2. Maintenance schedules and requirements for the facility's equipment; and
    - 3. Equipment manufacturer contacts (names, addresses, and telephone numbers) for parts and service.

History: New 2-2-93, Formerly 17-252.400, Amended 11-23-94.

62-252.400

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	02/02/93	01/08/93	03/24/94	59 FR 13883	04/25/94
1 <sup>st</sup> Revision	11/23/94	12/21/94	06/16/99	64 FR 32346	08/16/99

#### 62-252.500 Gasoline Tanker Trucks.

- (1) Applicability. All gasoline tanker trucks or trailers are subject to the prohibitions of Rule 62-252.500(2), F.A.C. In addition, all gasoline tanker trucks or trailers with a delivery-vessel capacity of more than 4,500 gallons are subject to the leak testing requirements of Rule 62-252.500(3), F.A.C.
- (2) Prohibitions.
  - (a) No gasoline tanker truck or trailer shall be filled at any bulk plant or bulk terminal required by the Department to have a vapor recovery system, unless the delivery vessel of the tanker truck or trailer is equipped to receive gasoline by means of submerged filling.
  - (b) No gasoline tanker truck or trailer shall be used to deliver gasoline to one or more gasoline dispensing facilities subject to the Stage I vapor control requirements of Rule 62-252.300, F.A.C., unless the tanker truck or trailer is equipped to dispense and receive gasoline by means of submerged filling and the vapors displaced from the storage tanks during filling are processed by a vapor recovery system at a bulk plant or bulk terminal.
- (3) Leak Testing. The delivery vessel and vapor recovery system of any gasoline tanker truck or trailer subject to the provisions of this subsection shall not sustain a pressure change of more than three inches of water (750 pascals) in five minutes when pressurized to 18 inches of water (4500 pascals) or evacuated to six inches of water (1500 pascals) using the test procedure described in U.S. Environmental Protection Agency Test Method 27, adopted and incorporated by reference at Rule 62-204.800, F.A.C. The delivery vessels and vapor recovery systems of tanker trucks shall be tested no less frequently than every 12 months. In addition, tanker trucks or trailers shall be tested prior to use if an accident damages the delivery vessel or vapor recovery system, if welding or cutting is done on the delivery vessel, or if the tanker truck or trailer is out of service for more than one year. Test results shall be reported on Department of Environmental Protection forms provided for that purpose and shall be retained with the tanker truck or trailer. A copy of the completed form shall be submitted to the department within 10 days of completion of testing to the address indicated on the form.

History: Formerly 17-2.650(1)(c)3. and 17-2.700(6)(c)2.d.; Amended 2-2-93, Formerly 17-252.500, Amended 9-10-96.

\_\_\_\_\_62-252.500

	State Effective Date	Date Submitted to EPA	Federal Register Date	Federal Register Cite	Federal Effective Date
Original Reg	10/15/92	11/23/92	10/20/94	59 FR 52916	12/19/94
1st Revision	02/02/93	01/08/93	03/24/94	59 FR 13883	04/25/94
2 <sup>nd</sup> Revision	09/10/96	09/25/96	07/21/97	62 FR 38918	09/19/97

# 62-252.800 Penalties.

02/02/93

Any person that commits a violation of any applicable provision of this chapter is liable for a civil penalty of up to \$10,000 per day.

03/24/94

\_62-252.800

04/25/94

59 FR 13883

History: New 2-2-93

Original Reg

State Effective	Date Submitted	Federal Register	Federal Register	Federal
Date	to EPA	Date	Cite	Effective Date

01/08/93

### 62-252.900 Form.

2<sup>nd</sup> Revision

09/10/96

The form used by the Department in the gasoline vapor control program is adopted and incorporated by reference in this section. The form is listed by rule number, which is also the form number, with the subject, title, and effective date. Copies of the form may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

62-252.900

09/19/97

62 FR 38918

(1) Gasoline Tanker Truck Leak Test Report. (Effective September 10, 1996)

09/25/96

History: New 2-2-93; Formerly 17-252.900; Amended 11-23-94, 9-10-96.

State Effective Date Submitted Federal Register Federal Register Federal Date to EPA Date Cite Effective Date Original Reg 02/02/93 01/08/93 03/24/94 59 FR 13883 04/25/94 1st Revision 11/23/94 12/21/94 06/16/99 64 FR 32346 08/16/99

07/21/97